State of California • Arnold Schwarzenegger, Governor
State and Consumer Services Agency
DEPARTMENT OF GENERAL SERVICES
Division of the State Architect - Headquarters

Certified Access Specialist Program

Staff Report 4.1

COMPOSITION OF THE CERTIFICATION EXAMINATION

September 1, 2004

EXECUTIVE SUMMARY

In carrying out Senate Bill 262 (Chapter 873, Statutes of 2003), the Division of the State Architect (DSA) proposes a certification examination composed in two parts. The first part, administered to all candidates, tests common knowledge of access codes. The second part, administered according to intended classification, tests that classification's specific knowledge and professional practices.

This paper describes the proposed components of the certification examination in two sections. The first section considers issues of general examination composition, without regard to any particular definition of certification classification. The second section applies this general framework to DSA's current certification criteria, to derive an examination to best measure a candidate's professional competence within each classification proposed.

In addition this paper modifies Staff Reports 3.1 and 3.2, presented on July 13, 2004, which refer to the certification classifications and qualifications, respectively. For further information supporting the current classifications and qualifications, see Appendix A and Appendix B. Table 1, page-2, summarizes the updates to these certification criteria, and the proposed certification examination.

RECOMMENDATIONS FOR COMMITTEE REVIEW AND COMMENT

The State Architect requests that the Implementation Committee review and comment on the following:

- The composition of the certification examination, as proposed in Table 2.
- The current certification classifications: Access Compliance Investigator and Access Design Specialist, aspresented in Table 1 and Appendix A.
- The updated certification qualifications, as presented in Appendix B.

Table 1: **Current Certification Criteria with Examination Components**

		Certification Classification	
		Access Compliance Investigator	**Access Design Specialist**
Roles	**Professional Services**	**Investigates** claims of access barriers, including: **Surveys** of existing facilities for compliance with accessibility codes and standards; **Reviews** of construction documents to determine compliance with accessibility codes and standards; and **Verifications** of the compliance of recently completed construction with accessibility codes and standards.	**Formulates design strategies** to incorporate all applicable requirements for the accessibility and usability of facilities. **Resolves design issues** that are insufficiently prescribed in accessibility codes and standards, by applying approved design methods. **Directs the design and delineation** of accessible features in construction documents.
	Limits to Professional Services	May only provide design resources, and not specific design solutions.	Professionally responsible for design of facility accessibility and usability.
Qualifications	**Educational Qualification**	One year of college coursework in construction technology or a related field. *or* High school diploma plus two additional years of eligible experience beyond the one-year experience qualification.	As required for architectural licensing: typically a five-year professional degree in architecture.
	Experience Qualification	One year of employment in a building construction trade, for a design professional, or for a building code enforcement agency. *or* One additional year of eligible college coursework beyond the one-year educational qualification.	Currently licensed to practice architecture in California.
Examination	**Discipline Knowledge Examination Components**	Accessibility Codes and Standards	Accessibility Codes and Standards
		Standard Methods of Field Investigation	Standard Methods of Field Investigation
	Professional Practice Examination Components	Drafting and Review of Accessible Features in Construction Documents	Drafting and Review of Accessible Features in Construction Documents
			Design Methods for Accessible Facilities and their Programmed Use

BACKGROUND

In three previous meetings, the Implementation Committee discussed program direction and scope, and assisted DSA in defining classifications, expectations and professional responsibilities. The composition of the certification examination–the cornerstone of a high quality certification system–remains the final issue for committee review.

Prior to exam development, DSA revisited the certification classifications defined in Staff Report 3.1. DSA renamed the Access Inspection Specialists classification to "Access Compliance Investigator;" and folded the duties of Access Plan Reviewers into it. The Access Design Specialist classification is now restricted to individuals with a California architectural license. The primary objective in reorganizing these classifications is to distinguish design activities from investigation activities, as shown by the professional roles listed in Table 1, *Current Certification Criteria with Examination Components*.

GENERAL EXAMINATION CONCEPTS

DSA has identified three principles as the basis for initial design of the CASp certification examination:

1. The discipline of disability access has a common body of knowledge, such as terminology and reference standards, to which stakeholders and other participants in this field refer.
2. The examination should differ between classifications to reflect the professional roles and areas of responsibility for each.
3. Candidates must achieve a passing score on each test section to demonstrate competency in a particular subject area.

To assist the reader in understanding general examination concepts, DSA shares the following concepts and terms.

- **Body of Knowledge:** The *body of knowledge* for the CASp program is represented by the *Certification Examination* and all training material provided to prepare for the examination.
- **Certification Examination:** The *Certification Examination* of the CASp program includes all of its *examination components*, each of which is individually administered to candidates at an exam site.
- **Examination Components**: These are of two types, representing either *discipline knowledge* or *professional practices*. For either type, the collection of topics that make up each examination component is referred to as its *knowledge bases*.
- **Discipline Knowledge:** The *Discipline Knowledge* is made up of those basic scientific concepts, disability rights regulations, and references to codes and standards that are commonly used in discussing disability access rights. It may be learned outside of a professional or field setting, such as in a classroom environment.

- **Professional Practices:** The knowledge of *professional practices* is distinguished from discipline knowledge in that it involves understanding and applications of a profession outside of disability access, such as architecture or building code enforcement.
- **Knowledge Base:** A *knowledge base* covers a topic and may be thought of as a chapter or section in a textbook. In the CASp program, these topics may be learned through DSA sponsored training, and a candidate's understanding of a knowledge base will be appraised by an examination component.

COMPOSITION OF THE CASp CERTIFICATION EXAMINATION

With general examination concepts understood, DSA was then able to identify the knowledge bases for which candidates are responsible. DSA organized the overall structure of the *areas of responsibility* for each certification classification in such a way that each area is, in fact, a *distinct knowledge base*.

Staff then examined each knowledge base to determine whether it represents discipline knowledge or professional practices. The knowledge base was then assigned to an examination component of the appropriate type.

The final step in examination composition was to explicitly associate examination components with the certification requirements for the two specialist classifications. Examination components for the discipline knowledge are required for all candidates, whereas those for professional practices are distinct for each certification classification.

The qualifications analysis for each classification, as shown in Appendix B, depicts the in-depth relationships between areas of responsibility (or knowledge bases) and the examination component they are associated with. Table 2, summarizes the relationships:

Table 2: Examination Components

	Certification Classification	
	Access Compliance Investigator	**Access Design Specialist**
Discipline Knowledge	**Accessibility Codes and Standards** Codes, Standards and Design Resources Verification of Required Scope	**Accessibility Codes and Standards** Codes, Standards and Design Resources Verification of Required Scope
Discipline Knowledge	**Standard Methods of Field Investigation** Observe and Record Field Conditions Prepare Survey Documents Report on Findings	**Standard Methods of Field Investigation** Observe and Record Field Conditions Prepare Survey Documents Report on Findings
Professional Practice	**Draft and Review of Accessible Features** Required Depiction of Accessible Elements Design of Elements involving Grade Changes Coordinate into Construction Documents	**Draft and Review of Accessible Features** Required Depiction of Accessible Elements Design of Elements involving Grade Changes Coordination into Construction Documents
Professional Practice		**Design Methods for Accessible Facilities and their Programmed Use** Architectural Impact of Disabling Conditions Resolution of Project Design Issues Accessibility for Special Occupancies Liability Issues in Disability Rights

Table Note: Each gray box represents an examination component. The examination title is bolded and underlined. Corresponding knowledge bases are listed below each examination title.

CONCLUSIONS

The proposed certification examination satisfies a range of objectives, from verifying the competence of each candidate, to an overall achievement of consistent performance and results by all access specialists. The certification examination takes advantage of organizational economies at two levels: (1) allows for a minimization of design and development effort for test questions and related training material for common discipline knowledge; (2) reduces the number of examinations administered to candidates by the CASp program.

Successful examination completion by all candidates is the best measure for ensuring the successful introduction of the Certified Access Specialist Program. The examination will result in improved quality and consistency of the investigational reporting and design results of certified access specialists.

IMPLEMENTATION

This paper will be reviewed consistently with all staff reports for the Certified Access Specialist program. Comments from senior staff of the Office of Universal Design will be incorporated before forwarding to the State Architect for final review, leading to his approval for distribution to the CASp Implementation Committee.

APPENDIX A: Certification Classifications

Reference: Staff Report 3.1, *Access Specialist Classifications*, dated 6/30/04

DSA's current certification criteria, as presented in this staff report, fundamentally restructures the classifications of access specialists. Recent events contributed to the development of the following statement of principles, for defining initial certification classifications:

Principle 1: *There should be a minimal number of certification classifications.*

This will provide increased clarity during the introductory period of the CASp program, and will also decrease the amount of regulation needed for implementation.

Principle 2: *The licensed architect should be the primary focus for certification.*

Architects are the only profession educated in the design of buildings and in evaluating the programmatic use of space.

They are professionally liable and subject to license sanctions for incompetence or negligence in providing these client services.

The Architects Practice Act addresses the issue of competence in the professional conduct of architects by stating[1]:

> An architect shall undertake to perform professional services only when he or she, together with those whom the architect may engage as consultants, are *qualified by education, training, and experience* in the specific technical areas involved.

DSA acknowledges that there presently exists, within the architectural profession, insufficient resources for *educating, training and* gaining worthwhile *experience* in accessibility, and that the CASp program should create or strengthen these resources. Furthermore, the California Architects Board appears to endorse efforts to educate and train its licensees in accessible design, as a continuing education offering.

Principle 3: *A second specialist classification should be established for conducting investigations.*

The dictionary definition of the verb "investigate" is[2]:

> to *observe* or study by close examination and systematic inquiry, or
> to make a *systematic examination*; especially to conduct an *official inquiry*.

Specialists in this classification would be *observing*, or performing *systematic examinations* and *official inquiries*.

Practicing disability rights consultants may be included in this classification. Since many of these consultants are persons with disabilities, their inclusion in the state

[1] California Code of Regulations, Title 16, Division 2, Article 9, Section 160(a)1.
[2] Merriam-Webster Online. http://www.m-w.com/

program to certify access specialists is underscored by the following policy statement[3]

> It is the policy of this state that qualified individuals with a disability shall be employed in the state service, the service of the political subdivisions of the state, in public schools, and in *all other employment supported in whole or in part by public funds* on the same terms and conditions as the non-disabled, unless it is shown that the particular disability is job related.

Principle 4: *The fundamental distinction between the two classifications is based on which group should provide design services for accessibility.*

The common dictionary definition of an "architect" is "a person who *designs* buildings and advises in their construction."[4] The Architects Practice Act provides a legal reference to design activities in the following[5]:

> The practice of architecture within the meaning and intent of this chapter is defined as offering or performing, or being in responsible control of, professional services which require the skills of an architect in the planning of sites, and the *design, in whole or in part, of buildings*, or groups of buildings and structures.

The distinction between the proposed dual classifications may also be seen by the following comparisons of terms and actions shown in Table 3 on page 8.

Table 3: Certification Classifications

Access Compliance Investigator	Access Design Specialist
Considers what is…	*Consider what should be…*
Generalist	***Specialist***
Investigator	*Innovator*
Reviewer	***Designer***
Analyzes	*Synthesizes*
Identifies the problem	*Solves the problem*

Reorganization of Previously Defined Professional Roles

In implementing the principles stated, DSA has made the following changes to its previous certification classifications:

1. Incorporated the roles of Access Inspection Specialists within the new classification for Access Compliance Investigators, and modified the meaning of *inspecting.* Rather than providing continuous or periodic inspection of accessible features, specialists will visit recently-completed construction sites to *verify* the compliance of accessible features with

[3] California Government Code, Division 5, Chapter 5, Section 19230(b).
[4] ibid.
[5] California Business and Professions Code, Division 3, Chapter 3, Section 5500.1(a).

accessibility codes and standards.

2. Relocated the roles of Access Plan Reviewers to the classification for Access Compliance Investigators.
3. Reduced the experience and education qualifications for Access Compliance Investigators (see Table 1, page 2).
4. Relocated the role of surveying existing facilities from the Access Design Specialist classification to that of Access Compliance Investigators.

Final representation of the roles for DSA's current certification criteria is shown in the "Roles" section of Table 1, page 2 of this report. Note the stated limits to professional services for Access Compliance Investigators.

APPENDIX B: Certification Qualifications
Reference: Staff Report 3.3, *Qualifications for Certification*, dated 6/30/04

The qualification tables that follow correspond to the two specialist classifications in DSA's current certification criteria. The presentation of these tables has been modified for those areas of responsibility that are to be qualified by examination. In these cases, the last column is shaded gray and contains the name of the examination component incorporating the knowledge bases alongside it.

Table B1: **Qualifications Analysis for Access Compliance Investigators**

Area of Responsibility	Expected Duties	Method of Qualification
Comprehend Construction Documents	Fully understand the organization and content of construction drawings and specifications. Efficiently locate different types of construction information for accessible elements included in the construction documents.	Education or Experience
Accessibility Codes, Standards and Design Resources	Provide references to regulations and technical guidelines that should be considered in correcting access deficiencies encountered. Provide references to approved performance standards and other resources that should be considered in design decisions on programmed use of space.	**Accessibility Codes and Standards**
Verify the Scope of Applicable Codes and Standards	Verify that construction documents for a proposed project respond to all applicable accessibility codes and standards, based on the type of project, its occupancies, and the programmed use of space.	
Observe and Record Field Conditions	Consider all applicable accessibility codes and standards at each area or function observed. Substantially record and describe deficiencies encountered.	**Standard Methods of Field Investigation**
Prepare Survey Documents	Utilize standard survey forms, or provide explanation to client for not using such forms. Respond to every item listed on the survey form that applies to the conditions observed.	
Report on Findings	Formulate an opinion on overall compliance with accessibility codes and standards for the subject of the investigation. Describe the legal obligations of all parties to be involved in corrective construction resulting from the investigation.	

Area of Responsibility	Expected Duties	Method of Qualification
Required Depiction of Accessible Elements	Ensure that individual accessible elements in the construction documents are sufficiently delineated to demonstrate compliance with applicable access codes and standards, in the form of graphics, dimensioning and annotation, and that these elements are coordinated with all related drawings and specification sections.	**Drafting and Review of Accessible Features in Construction Documents**
Design Elements involving Finish Grade Changes	Analyze vertical elevation data shown in topographic and civil engineering drawings, in order to correctly determine proposed slopes and other changes in finish grades of accessible elements.	
Coordinate Accessible Elements in Construction Documents	Incorporate into the design of all building systems all aspects of construction related to accessible elements. Review all construction documents to identify absence of required accessible features.	
Construction Contract Administration	Knowledge of construction contract administration, including incremental approvals, deferred approvals, issued addenda, and proposed change orders.	Experience

Table B2: **Qualifications Analysis for Access Design Specialists**

(This table incorporates Table B1 in its entirety)

Area of Responsibility	Expected Duties	Method of Qualification
Collaboration on Design Issues	Characterize the impact of project design decisions on compliance with accessibility codes and standards	Education and Experience
Architectural Impacts of Disabling Conditions	Understand the ergonomic adaptations necessary to accommodate persons with particular disabilities. Awareness of resources for design consultation regarding specific disabilities. Design considerations for job accommodations and other practical concerns of daily life by people with disabilities	**Design Methods for Accessible Facilities and their Programmed Use**
Strategic Planning to Resolve General Design Issues of Project Accessibility	Determine the full scope of applicable accessibility requirements for a project, including codes, standards, regulatory law, and statutory law. Consider the operational effects of programmed space use to assess long-term compliance with requirements for accessibility and usability. Establish an integrated design solution for directional signage (way-finding) across the entire project site. For existing facilities, determine corrective action to comply with accessibility and usability requirements, and advise on prioritized implementation of corrective construction.	
Strategic Planning of Accessibility for Special Occupancies	Awareness of approved standards, guidelines and other resources to be considered in the design of special use facilities and occupancies. Evaluate approved design resources to identify relevant issues, incorporate applicable recommendations, and properly apply appropriate design methods. Ability to write a statement of design intent for accessibility and usability of a special use facility or occupancy.	
Liability Issues in the Enforcement of Disability Rights	Knowledge of the principles of equivalent facilitation and evaluation methods. Understand procedural applications to identify equitable performance expectations in the design of equivalent facilitation. Risk management of the obligations and diligence required in the development of interpretive solutions to provide accessibility in situations not clearly regulated or prescribed.	